

Use the Distributive Property to Multiply

Name _____

Learning Target: Use the Distributive Property to multiply.

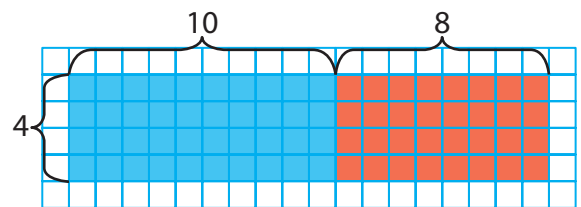
Success Criteria:

- I can use an area model to multiply.
- I can use known facts to find a product.
- I can explain how to use the Distributive Property.

Think and Grow

Example Use an area model to find 4×18 .

Model the expression. Break apart 18 as $10 + 8$.



Then use the Distributive Property.

$$\begin{aligned} 4 \times 18 &= 4 \times (\underline{\quad} + \underline{\quad}) \\ &= (4 \times 10) + (4 \times 8) \\ &= 40 + 32 \\ &= \underline{\quad} \end{aligned}$$

Rewrite 18 as $10 + 8$.

Distributive Property

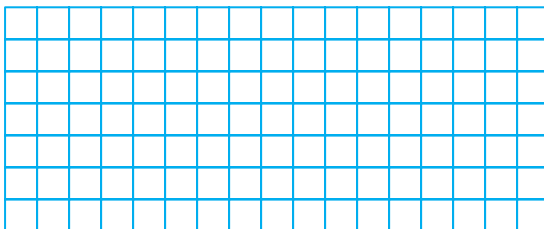
You can also rewrite 18 as $9 + 9$, find the product 4×9 , then double it.



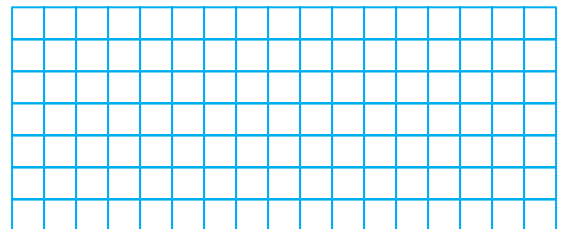
Show and Grow

Use an area model to find the product.

1. $5 \times 13 = \underline{\quad}$



2. $3 \times 15 = \underline{\quad}$



Find the product.

3. $6 \times 42 = \underline{\quad}$

4. $5 \times 73 = \underline{\quad}$

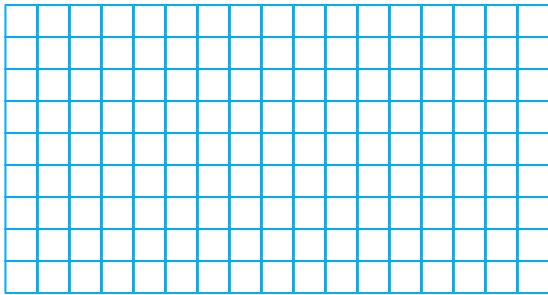
5. $8 \times 55 = \underline{\quad}$

Practice

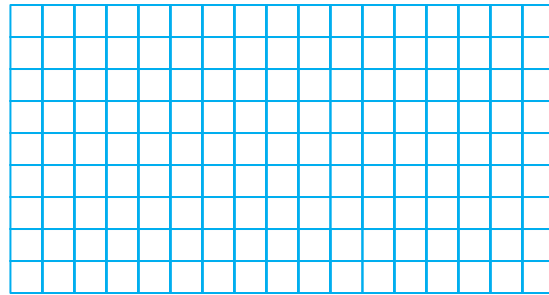
Name _____

Use an area model to find the product.

6. $8 \times 12 = \underline{\hspace{2cm}}$



7. $5 \times 14 = \underline{\hspace{2cm}}$



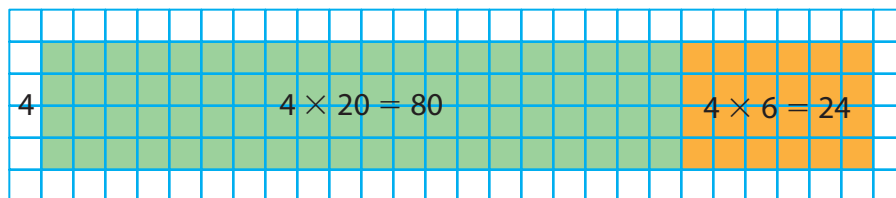
Find the product.

8. $9 \times 25 = \underline{\hspace{2cm}}$

9. $4 \times 37 = \underline{\hspace{2cm}}$

10. $68 \times 3 = \underline{\hspace{2cm}}$

11. **MP Number Sense** Use the area model to complete the equation.



$4 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

12. **Which One Doesn't Belong?** Which expression does *not* belong with the other three?

7×46

$7 \times (40 + 6)$

$7 \times (40 \times 6)$

$(7 \times 40) + (7 \times 6)$

13. **MP Structure** Explain how to use the Distributive Property to find 5×16 two different ways.

14. **Modeling Real Life** Your class wants to collect 200 cans of food. There are 24 students in your class. Each student collects 9 cans of food. Does your class reach the goal? Explain.

15. **Modeling Real Life** You can use the Internet for up to 150 minutes each week. You use the Internet for 35 minutes each day for 4 days. Have you reached your weekly limit yet? Explain.